Mathematics 7
Reference Sheet

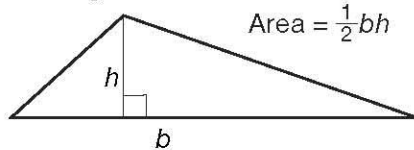### Circle
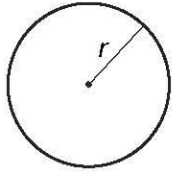
$Area = \pi r^2$
$Circumference = 2\pi r$
$Circumference = \pi d$

Cylinder
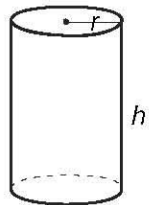
$Volume = \pi r^2 h$
$Surface\ Area = 2\pi r^2 + 2\pi rh$

Triangle

$Area = \frac{1}{2}bh$

Parallelogram
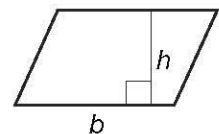
$Area = bh$

Trapezoid
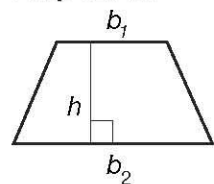
$Area = \frac{1}{2}h(b_1 + b_2)$

Rectangle
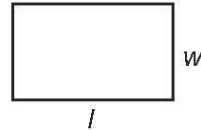
$Area = lw$
$Perimeter = 2l + 2w$

Cube
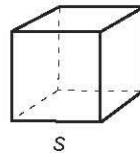
$Volume = s^3$
$Surface\ Area = 6s^2$

Rectangular Prism
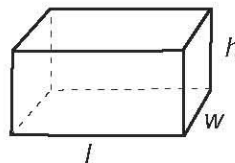
$Volume = lwh$
$Surface\ Area = 2wl + 2lh + 2wh$

Definitions

MEAN:	The sum of a set of numbers divided by the number of elements in the set.
MEDIAN:	The middle number or average of the two middle numbers in a collection of data when the data are arranged in order.
MODE:	The number or numbers that occur most often in a collection of data.
RANGE:	The difference between the greatest and the least numbers in a collection of data.
REFLECTION OR FLIP:	A mirror image of a figure across a line of symmetry.
TRANSLATION OR SLIDE:	A change in position of a figure. All points in the figure move in the same direction for the same distance.
ROTATION OR TURN:	Turning a figure clockwise or counterclockwise about a point.

DISTANCE
TRAVELED: $distance = rate \times time$

Customary Conversions

8 ounces = 1 cup
2 cups = 1 pint
2 pints = 1 quart
4 quarts = 1 gallon
8 pints = 1 gallon
3 teaspoons = 1 tablespoon
16 tablespoons = 1 cup
16 ounces = 1 pint
16 ounces = 1 pound
5280 feet = 1 mile

Metric Conversions

kilo-	hecto-	deka-	**UNIT**	deci-	centi-	milli-
k	h	da	meter (m) liter (l) gram (g)	d	c	m